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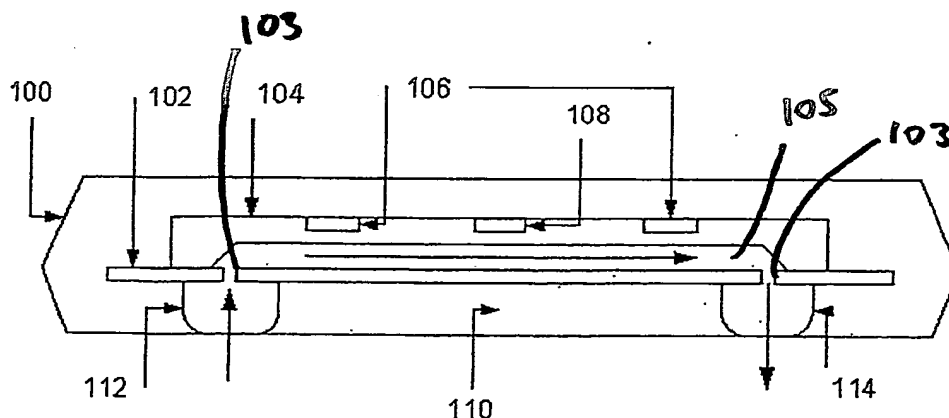
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(54) Title: CALORIMETRIC FLOW METER



(57) Abstract: An encapsulated calorimetric flow meter according to the present invention comprises an integrated circuit (104) mounted on a lead frame (102). The integrated circuit has a channel (105) provided in its lower face, the channel being aligned with two holes (103) provided in the lead frame, the holes coinciding with the ends of the channel (105). There are further slots (111) in the lead frame (102) alongside the integrated circuit to thermally isolate it from the rest of the lead frame (102), which acts as a heat sink to keep the entry and exit fluid at ambient temperature. The flow meter is manufactured by mounting the integrated circuit (104) on to a suitable lead frame (102). The assembly of integrated circuit (104) and lead frame (102) is then inverted and blobs of gel (112, 114) are then deposited onto the lead frame (102) covering the holes (103). The assembly is then inserted into a mould (100) and encapsulated within a suitable mould compound. When the assembly is ejected from the mould cavity the gel can be removed and the holes (103) and the channel (105) exposed to facilitate fluid flow into, out of and along the channel (105).



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